

**THYROID SODIUM/IODIDE SYMPORTER AND
NUCLEIC ACID ENCODING SAME**

Abstract of the Disclosure

5 The present invention provides a purified and
isolated nucleic acid encoding a sodium/iodide symporter.
The present invention also provides purified sodium/iodide
symporter, a vector comprising nucleic acid encoding
sodium/iodide symporter, a host cell transformed with the
10 vector, and a method for producing recombinant
sodium/iodide symporter. In addition, the present
invention provides nucleic acid probes and mixtures
thereof specific for sodium/iodide symporter nucleic acid
and antibodies immunoreactive with sodium/iodide
15 symporter. The present invention also provides a method
for diagnosing and treating thyroid disorders associated
with non-functional sodium/iodide symporter. Furthermore,
the present invention provides a method for the selective
ablation of tissue. The present invention also provides
20 a method for identifying an iodide transport protein in
non-thyroid tissue. Finally, the present invention
provides a non-human, transgenic model for a thyroid
disorder.

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